

REMARKS

The Office Action dated March 5, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Status of the Claims

Claims 34-39, 41-46, 48 and 51-71 have been amended herein to more particularly point out and distinctly claim the subject matter of the invention. Claims 49 and 50 have been cancelled. New claims 72 and 73 have been added. No new matter has been added. Thus, claims 34-48 and 51-73 are currently pending in the application and are respectfully submitted for consideration.

Allowable Subject Matter

Applicant notes with appreciation the Examiner's indication that claims 45-47 are allowed and that claims 36, 37, 43, 44, 51, 53, 55 and 64-66 would be allowable if rewritten in independent form. Claims 36, 37, 43, 44, 51, 53, 55 and 64 have been amended into independent form. Applicant kindly thanks the Examiner for his assistance and respectfully submits that the remaining rejected claims are also allowable over the cited art.

Rejection under 35 U.S.C. § 102

Claims 34, 35, 38-42, 48-50, 52, 54, 56-63 and 67-71 were rejected under 35 U.S.C. § 102(e) as being anticipated by Watanabe et al. (U.S. Patent No. 6,285,662). The Office Action took the position on pages 2-12 that Watanabe et al. discloses all of the

features of the rejected claims. Applicant respectfully submits that Watanabe et al. fails to disclose or suggest all of the features of the above-rejected claims under 35 U.S.C. § 102(e). Reconsideration of the claims is respectfully requested.

Independent claim 34, from which claims 35, 38-42 and 48 depend, recites a method including receiving a parameter defining allowed access slots of a physically existing random access channel from a base transceiver station of a mobile communications network by at least one mobile station of a plurality of mobile stations of the mobile communications network, determining, at the at least one mobile station, the allowed access slots of the physically existing random access channel based on the parameter, and using, at the at least one mobile station, at least one of the determined allowed access slots of the physically existing random access channel to initiate a random access operation with the base transceiver station.

Independent claim 52 recites a system including a base transceiver station configured to transmit a parameter defining allowed access slots of a physically existing random access channel and a plurality of mobile stations configured to receive the parameter to determine the allowed access slots of the physically existing random access channel based on the parameter, and to use at least one of the determined allowed access slots of the physically existing random access channel to initiate a random access operation with the base transceiver station.

Independent claim 54, from which claims 56, 57, 72 and 73 depend, recites an apparatus including setting means for setting a parameter defining allowed access slots of

a physically existing random access channel. At least one mobile station initiates a random access operation to the apparatus based on the allowed access slots of the physically existing random access channel. The apparatus also includes transmitting means for transmitting the parameter to the plurality of mobile stations.

Independent claim 58, from which claims 59-63 depend, recites an apparatus including a receiver configured to receive from a network element a parameter defining allowed access slots of a physically existing random access channel for a random access operation, a determiner configured to determine the allowed access slots of the physically existing random access channel based on the parameter received from the network element, and a transmitter configured to initiate transmission of a random access message to the network element using at least one of the determined allowed access slots of the physically existing random access channel.

Independent claim 67 recites a method including receiving a parameter defining allowed access slots of a physically existing random access channel for a random access operation in a mobile communications network, determining the allowed access slots of the physically existing random access channel based on the parameter, and initiating transmission of a random access message using at least one of the determined allowed access slots of the physically existing random access channel.

Independent claim 68 recites a method including receiving information about a set of available uplink access slots of a random access channel in a mobile communications network, deriving available uplink access slots, in a next full access slot set, for the set of

available uplink access slots, and randomly selecting one access slot among the available uplink access slots to initiate a random access procedure.

Independent claim 69 recites a method including receiving a set of available random access channel sub-channels in a mobile communications network, where a random access channel sub-channel defines a sub-set of a total set of uplink access slots, deriving available uplink access slots, in a next full access slot set, for the set of available random access channel sub-channels, and randomly selecting one access slot among the available uplink access slots to initiate a random access procedure.

Independent claim 70 recites a method including receiving an access parameter message sent on a broadcast channel in a mobile communications network, where the access parameter message defines allowed transmission slots in which random access channel transmissions are limited to occur. The allowed transmission slots are dictated by slot offset and slot duration parameters. The method also includes calculating an allowed transmission slot based on the slot offset and slot duration parameters, and initiating transmission of a random access message using the allowed transmission slot.

Independent claim 71 recites an apparatus including receiving means for receiving from a network element a parameter defining allowed access slots of a physically existing random access channel for a random access operation, determining means for determining the allowed access slots of the physically existing random access channel based on the parameter received from the network element, and transmitting means for initiating transmission of a random access message to the network element using at least

one of the determined allowed access slots of the physically existing random access channel.

As will be discussed below, Watanabe et al. fails to disclose or suggest the features of the presently pending claims.

Watanabe et al. generally discusses “an apparatus, and associated method, by which to incrementally alter the size of a contention window, used by a sending station operable in such a system, to send a packet of data within the boundaries defined by the contention window” (column 1, lines 11-15).

[T]he sending station transmits packets of data upon selected time slots defining random access channels of a MAC (medium access control) frame in which time slots are dynamically allocated on a frame-by-frame basis. In a TDD (time-division duplex) system, an indication of the number of time slots allocated to form random access channels in that frame is broadcast to the sending station. At least selectively responsive to the number of time slots allocated to form random access channels in the frame, a determination is made as to the size of the contention window.

(Column 3, line 66, through column 4, line 9, of Watanabe et al.).

Claim 34 recites, in part, “a parameter defining allowed access slots of a physically existing random access channel”. Independent claims 52, 54, 58 and 67-71, which each have their own scope, recite similar features. The Office Action stated on page 3 that Watanabe et al. discloses “a parameter (a number of timeslot allocated to form random access channel, see col.3, line 66--col.4, line 9) defining allowed access slots of a physically existing random access channel (RACH)”. Applicant respectfully submits that Watanabe et al. fails to disclose or suggest these features.

Per the above, Watanabe et al. discusses that an indication of the number of time slots allocated to **form** random access channels in that frame is broadcast to the sending station. As such, it appears that the access channel is not formed prior to receipt of the indication of the number of time slots. On the other hand, claim 34 recites a parameter defining allowed access slots of a **physically existing** random access channel. Because Watanabe et al. does not disclose a parameter defining allowed access slots of a physically existing random access channel, Watanabe et al. is further incapable of determining allowed access slots of the physically existing random access channel based on said parameter, as claimed.

Also, while Watanabe et al. discusses random access channels of a MAC, Watanabe et al. does not disclose that a “physical” random access channel is used. In fact, the words “physical” and “PRACH” do not appear anywhere in Watanabe et al. On the other hand, as discussed above, claim 34 recites a “physically existing” random access channel.

Further, Watanabe et al. discusses that slots for plural random access channels are defined. As discussed in the Background of the present application, using multiple channels may be undesirable as “[t]his leads to an undesirable complex random access procedure”. On the other hand, claim 34 recites that “a physically existing random access channel” is used. An advantage of using a single random access channel is that the capacity thereof can be used efficiently so that multiple PRACH channels per cell are not required.

Claims 49 and 50 have been cancelled. Claims 35, 38-42, 48, 56, 57 and 59-63 depend from claims 34, 54 or 58 and add further features thereto. Thus, the arguments above with respect to the independent claims also apply to the dependent claims.

Per the above, Watanabe et al. fails to disclose or suggest the features of the above-rejected claims under 35 U.S.C. § 102(e). Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

New Claims

Claims 72 and 73 have been added herein. Claims 72 and 73, which depend from claim 54 and each have their own scope, recite similar features to cancelled claims 49 and 50, respectively. Accordingly, the arguments above with respect to the independent claims also apply to these new dependent claims. Thus, for at least the reasons argued above with respect to the independent claims, it is respectfully submitted that claims 72 and 73 patentably distinguish over the cited art.

Conclusion

For at least the reasons presented above, it is respectfully submitted that claims 34, 35, 38-42, 48, 52, 54, 56-63 and 67-73 also patentably distinguish over the cited art. Accordingly, it is respectfully requested that the claims be allowed and the application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal